



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,984	11/07/2001	Satoru Kawakami	7217/65957	1207

7590 06/06/2005

JAY H. MAIOLI
Cooper & Dunham LLP
1185 Avenue of the Americas
New York, NY 10036

EXAMINER

NATNAEL, PAULO S M

ART UNIT PAPER NUMBER

2614

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,984

Applicant(s)

KAWAKAMI, SATORU

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8 and 9 is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1-3,8** are rejected under 35 U.S.C. 102(e) as being anticipated by Kawai, JP Application No. 2000-332143.

Considering claims 1 and 8, Kawai discloses a digital broadcast receiving tuner suitable for miniaturization by placing tuner units on opposite surfaces on a board, comprising, a low-priced digital broadcast receiving tuner having higher productivity as well as a less number of components than a conventional tuner because, on one surface of an insulating board, there is formed a first tuner while, on the other surface thereof, there is formed a second tuner, and therefore a single insulating board can be shared. As illustrated on Fig.2, Kawai teaches an insulating board 1 is a multi-layer board formed by stacking a plurality of boards 1a,1b, and 1c on both surfaces and between the two wiring patterns 2a and 2b the insulating board 1 having the three layers 1a,1b, and 1c. (see abstract of the disclosure)

Kawai also discloses an insulating board having a first surface and a second surface; a first wiring pattern disposed on the first surface and a second wiring pattern disposed on the second surface; and a first tuner disposed on the first surface and a second tuner disposed on the second surface, wherein the first and second tuners each comprise a respective high-frequency unit and a corresponding demodulation unit. wherein the high-frequency unit of the first tuner and the demodulation unit of the second tuner are arranged at a first position opposite to each other with the multi-layer board interposed there between, and the demodulation unit of the first tuner and the high-frequency unit of the second tuner are arranged at a second position opposite to each other with the multi-layer board interposed there between; the multi-layer board comprises at least the two a first grounding conductor layer and a second grounding conductor layers between lamination layers, the first grounding conductive layer is more proximate to the first tuner than the second grounding conductive layer, each grounding conductive layer has respective deletion units and a corresponding first remainder, the deletion units of the first grounding conductive layer and the first remainder of the second grounding conductive layer are arranged at the first position, and the deletion units of the second grounding conductive layer and the first remainder of the first grounding conductive layer are arranged at the second position, and the deletion units of the first grounding conductive layer are arranged more proximate to the high-frequency unit of the first tuner than the first remainder of the second grounding conductive layer and the deletion units of the second grounding conductive layer are arranged more proximate to the high-frequency unit of the second tuner than the first

remainder of the first grounding conductive layer to thereby increase a facing distance between the respective wiring patterns and the corresponding first remainder.

Considering claims 2 and 3, see rejection of claim 1 and 8.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP
Application No. 2000-332143.

Considering claim 9, Kawai does not specifically disclose a selecting means and recording means for selecting and recording one of the first and second transport stream data; However, the examiner takes official notice in that it is notoriously well known in the art to have a selector to select one signal when the system has a choice or option of two or more signals to select from; As to the recording means, it is notoriously well known to utilize a VCR or similar other devices to record desired or selected programs or shows, and therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Kawai by providing a selector

and recording means in order to make the system of Kawai versatile and more useful to the user.

Allowable Subject Matter

5. Claims 6, 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art discloses three-layers and claims 6 and 7 disclose a four layered circuit board, i.e., first and second wire pattern layers and first and second insulating layers. wherein said ground layer has a first ground layer formed so as to confront said first wire pattern layer so that a first insulating layer corresponding to a part of said insulating layer is sandwiched between said first ground layer and said first wire pattern layer, and a second ground layer formed so as to confront said second wire pattern layer so that a second insulating layer corresponding to a part of said insulating layer is sandwiched between said second ground layer and said second wire pattern layer, said first ground layer and said second ground layer being confronted to each, as in claim 6; and, wherein said four layered circuit board is formed by attaching a first circuit board comprising said first wire pattern layer, said first insulating layer and said first ground layer and a second circuit board comprising said second wire pattern layer, said second insulating layer and said second ground layer onto both surfaces of said third insulating layer, as in claim 7;


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PMN
May 30, 2005



PAULOS M. NATNAEL
PATENT EXAMINER